

## Avoidance and Minimization Measures for Threatened and Endangered Bats

Avoidance and minimization measures (AMMs) related to threatened and endangered bats should be implemented where applicable. AMMs, if adopted under appropriate circumstances, are expected to reduce the potential impacts of the proposed action on bat species. In some instances, impacts will be reduced to levels that are insignificant or discountable; therefore, not likely to adversely affect (NLAA) either species.

The following AMMs can be used to avoid and minimize impacts to threatened and endangered bats. When submitting a consultation packet of information to the US Fish and Wildlife Service (USFWS) include any appropriate AMMs. Be aware that submission of AMMs to the USFWS by the LPA indicates a commitment to implement the appropriate AMM.

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all environmental commitments, including all applicable AMMs.

### Tree Removal

“Trees”, as used in the AMMs, refers to trees that are suitable habitat for each species within their range. Refer to the USFWS current [summer survey guidance](#) for the latest definitions of suitable habitat.

Tree Removal AMMs:

- Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the project. This may not always be practicable.
- Apply Time of Year (TOY) restrictions for tree removal when bats are not likely to be present. Refer to Iowa DOT Standard Specification [2101.01.A](#) for tree removal restriction dates.
- Ensure tree removal is limited to that specified in project plans. Install bright colored flagging/fencing prior to any tree clearing to ensure contractors understand and stay within clearing limits.
- Avoid cutting down documented Threatened or Endangered bat trees that are suitable for roosting, or trees within 0.25 miles of roosts, or documented habitat at any time of year.

### Bridges

Occasionally, Threatened or Endangered Bats may roost on or under bridges. If construction activity is planned during the active bat roosting season, the LPA should determine if bats are present on or under the bridge.

For bridge removal projects, if Threatened or Endangered Bats are roosting on or under the bridge, bridge removal may occur in the hibernation period for bats. Refer to Iowa DOT Standard Specification [2101.01.A](#) for hibernation period dates. This option may not be practicable; the LPA should consult with USFWS to determine options.

For bridge repair/maintenance/rehabilitation work, if bridge assessment for bats suggests presence of bats, in order to completely avoid direct effects to roosting bats, perform any bridge work during the winter hibernation period for bats. Refer to Iowa DOT Standard Specification [2101.01.A](#) for hibernation period dates. This option may not be practicable; the LPA should consult with USFWS to determine options.

The following types of bridge work can be conducted with the presence of bats:

- Above deck work that does not drill down to the underside of deck or include vibration or noise levels above general traffic (e.g., road paving, wing-wall work, work above that does not drill down to the underside of the deck).
- Below deck work that is conducted away from roosting bats, and does not involve vibration or noise levels above general traffic noise (e.g. some abutment, beam end, scour protection, or pier repair).